MINUTES UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY UTAH WATER QUALITY BOARD MEETING

288 North 1460 West Cannon Building, Room 125 Salt Lake City, Utah **November 17, 2000** 9:30 p.m.

UTAH WATER QUALITY BOARD MEMBERS PRESENT

K.C. Shaw, Chair
 Ray M. Child
 Douglas E. Thompson
 Robert G. Adams
 Neil Kochenour
 Ron C. Sims
 Dianne R. Nielson
 Nan W. Bunker
 J. Ann Wechsler
 William R. Williams

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Don Ostler, Faye Bell, Nancy Hess, Walter Baker, Jay Pitkin, Tim Beavers, Harry Campbell, Kiran Bhayani, Bill Damery, Dennis Frederick and Candace Cady

OTHERS PRESENT

Name Organization Representing
Wendy Crowther Clyde Snow Session & Swenson

Bryan Harris Beaver County

Dennis Miller Beaver County Planning, Zoning
Jeff Coombs Tooele County Health Dept
Marv Maxell DEQ/Division of Air Quality

Erik Jacobsen Circle Four Farms Steve Pulman Circle Four Farms

David DoxeyIron County Attorney's OfficeRich WilsonIron County Planning CommissionChad NayIron County Zoning AdminReed EricksonFive County AOG - Iron County

Warren Peterson Circle Four Farms

Robin Bradshaw Beaver County Planning Commission

Fred Nelson Attorney General Office

Judy Fahys Tribune

Scott Hacking Southwest District Engineer

Daryl McLaughlin Sunrise Engineering
Brian Davis Sunrise Engineering

Chairman Shaw called the Board meeting to order at 9:35 a.m. He welcomed those in attendance and invited the members of the audience to introduce themselves.

APPROVAL OF MINUTES OF THE OCTOBER 20, 2000 MEETING

Ms. Wechsler noted the following corrections: 1) Page 3, 2nd paragraph "Mayor Thompson asked if staff had *considering* contingencies", should read "Mayor Thompson asked if staff had *considered* contingencies"; 2) Page 5, 2nd sentence the phrase "since Millville is close to Logan" should read "and Millville is close to Logan".

Action Taken:

It was moved by Ms. Wechsler, seconded by Mr. Adams and unanimously carried to approve the minutes of the October 20, 2000 meeting with the above noted corrections.

ADOPTION OF RULES

1) Requirements for Wastewater Discharges R317-1-3, Change in Proposed Rule (ACTION ITEM): Mr. Tim Beavers said that over the last few years staff have been looking at discharging lagoons systems in the state and found frequent violations of TSS limits. Rulemaking was initiated to propose an addition to the rules to allow, on a case by case basis, higher effluent limits for these facilities. Mr. Beavers discussed comments received during the public comment period for the proposed changes as outlined under Tab 2 of the Board's Packet. He noted that there was very little substantive comment on the rule, and all responses were favorable.

Mr. Beavers said that in response to Mr. Shaw's question at the last meeting about facilities having to be in violation of their permit to apply for the modified standards, staff has proposed to remove criteria R317-1-3.2.G.1 and 3.2.G.7 from the originally proposed amendment. Mr. Adams asked if changing the standards would change the design criteria. Mr. Beavers responded that the design standards presently in R317-3 will not change. Mr. Beavers noted that the rules will have to go out for an additional 30 day public notice period. Mr. Ostler said that staff is asking the Board to consider adopting the amended rule with the condition that no significant comments are received following publication in the Utah Bulletin. If there are significant comments, the rule would come back to the Board for approval.

Action Taken:

It was moved by Ms. Bunker, seconded by Dr. Kochenour and unanimously carried to approve the proposed changes to R317-1-3, subject to the condition that no significant adverse comments are received during the public notice period for the rule.

2) Onsite Wastewater Systems Rule Amendments, R317-4 (Action Item): Mr. Kiran Bhayani summarized the proposed amendments and public comment received on the rule as outlined under Tab 2 of the Board's Packet. Mr. Bhayani said that the proposed change authorizes local health departments to allow fewer soil tests than one per lot, based on the uniformity of prevailing soil and ground water characteristics and available percolation data, in determining wastewater disposal feasibility for proposed subdivisions. He said that local health departments are generally supportive of the change. One opposing comment was received from Victor Ovis, who represents the Homeowners Association of Canyon Meadows in Utah County. Mr. Ovis opposed the change because he believes it does not adequately protect new lot owners. Mr. Shaw asked if the burden was now on the developer of the property to prove to the health department that less than one

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percolation test per lot is acceptable. Mr. Bhayani responded in the affirmative and said this allows the local health department to receive information that fewer than one test per lot is acceptable. Mr. Ostler pointed out the Legislative Rules Review Committee received some complaints on the initial change from one percolation test for every three acres to one for every lot. They felt there needed to be some flexibility in the rule. Mr. Ostler said that staff found that almost all health departments felt there are situations where some flexibility will be justified. Mr. Jeff Coombs from Tooele County Health Department commented that they are in support of the proposed amendment.

Action Taken: It was moved by Mr. Adams, seconded by Mr. Williams and unanimously carried to adopt the proposed amendments to R317-4.

3) Underground Injection Control Program R317-7, Change in Proposed Rule (Action Item):

Mr. Dennis Frederick discussed the proposed rule as outlined under Tab 2 of the Board's packet.

He said that the originally proposed amendments provide for the closure or permitting of motor vehicle dry wells and large capacity cesspools. He noted that this is a change in the federal rule which needs to be adopted by state programs. Mr. Frederick said that no comments were received during the public comment period for the originally proposed amendments. He identified a few minor changes which have been made to the rule following the Board's authorization to proceed with rulemaking. These changes included revising outdated references to federal rules, and editorial corrections. He said that it was the staff's recommendation that the Board adopt the proposed changes, pending no significant comments during the additional 30-day public notice period for the rule.

Action Taken: It was moved by Mayor Thompson, seconded by Ms. Bunker and

unanimously carried to adopt the proposed amendments to R317-7, subject to the condition that no significant adverse comments are

received during the public notice period for the rule.

4) Utah Pollutant Discharge Elimination System R317-8, Change in Proposed Rule (Action Item): Mr. Harry Campbell discussed the proposed amendments as outlined under Tab 2 of the Board's Packet. He said that the amendments update the state's UPDES rules to parallel the federal rules. The staff is obligated to make these changes because of the primacy delegation that EPA has given the state over the NPDES program. Mr. Campbell said that as a result of public comments received on the proposed rule, three inadvertent omissions were identified. He said that staff has corrected these omissions and has changed some formatting to make the rule more readable. He said that the additional change will require that the rule go through an additional 30-day public notice period.

Action Taken: It was moved by Ms. Wechsler, seconded by Mayor Thompson and

unanimously carried to adopt the proposed amendments to R317-8, subject to the condition that no significant adverse comments are

received during the public notice period for the rule.

CIRCLE FOUR FARMS PRESENTATION

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Mr. Dennis Frederick introduced the topic to the Board. He recalled that in December of 1999, the Board held a two-day permit appeal hearing regarding the issue of appropriate best available technology (BAT) at Circle Four Farms. At that time, the Board encouraged both the Division and Circle Four to continue to look for a better alternative or improvements to existing technology. In the interest of time, Mr. Frederick referred the Board to a staff summary report of BAT issues (Tab 3). He said that the search for a superior alternative to anaerobic lagoons for hog farms is continuing. In the meantime, staff is addressing the current situation and looking for ways to improve it. He said that more recently, much of the focus has shifted to issues of operational efficiency and odor abatement strategy issues. Mr. Frederick asked if there were any questions from the Board on the information in the staff summary.

Mr. Frederick introduced representatives from Circle Four Farms, the Iron County Planning Commission the Beaver County Planning Commission.

Mr. Erik Jacobsen of Circle Four Farms gave a slide presentation which reviewed and summarized various odor control and alternative technology investigations conducted by Circle Four Farms. The following items were discussed:

- Technical aspects of the BION Nutrient Management system and the process leading for its selection for evaluation. The system is functioning, but took longer to mature than originally thought. The system is currently operational, and evaluation will continue in the spring to determine if it will meet objectives.
- Technical aspects of the PWI aerobic lagoon system. The system utilizes high efficiency aeration. Pilot plant is currently in place. Evaluation will start in spring of 2001. The system has less promise in the short-term than the BION, but Circle Four felt that it warranted evaluation.
- Technical aspects of the BioCap lagoon cover. A semi-permeable membrane cover is used to control odor while still maintaining evaporation rates. A pilot cover is in place on a primary lagoon. Evaluation is underway.
- -Agreement between Smithfield Foods and the North Carolina State University to develop an economically feasible alternative waste management system for swine production within the next 2-3 years. Smithfield Foods is contributing \$15 million to this effort.
- Anaerobic digestion technologies. This technology has been looked at on and off by the industry, but has always been shelved for one reason or another. Current advances appear to warrant a reinvestigation of this type of process. Circle Four is proceeding in this direction.

Dr. Nielson suggested that there might be value in continuing to pursue chemical air quality monitoring either to correlate with smell perception tests being conducted or to perhaps see a change in the fingerprint of air quality samples obtained from the different treatment technologies. Members of the Board discussed several aspects of the different treatment technologies with Mr. Jacobsen.

Mr. Steve Pullman of Circle Four Farms discussed the formation of the Circle Four Farms Coordination Committee. He said that the committee was made up of representatives from the Department of Environmental Quality, Division of Water Quality, Division of Air Quality, Beaver County, Iron County, Southwest Public Health Department, and Circle Four. The objective of the group is to provide a forum for government agencies and Circle Four to collectively discuss all relevant issues; develop and implement all agreed upon programs and tests which will provide good science; provide accurate information and improve overall communication all among the parties involved.

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Mr. David Doxey, Iron County Attorney's Office, said that the County is attempting to address odor and groundwater problems through an agricultural ordinance. He discussed the main provisions of the ordinance: 1) the legislative body of Iron County would have the ability to decide where these farms would go. This is accomplished through the zoning regulation; 2) addressing the way these facilities handle their waste. This is an issue that the county is still grappling with. They have been advised that the only thing that really has been proven to work is aerobic lagoons. The County has held approximately 12 public hearings related to their ordinance at this time. The overwhelming sentiment is that the odor problem off the Circle Four lagoons and operations is at extreme levels and is an extreme problem. Mr. Doxey noted that according to the North Carolina Attorney Generals Office, the \$15 million North Carolina State University study funded by Smithfield Foods came as a result of \$12.5 million lawsuit. He expressed concern that the industry was out of control due to animal numbers and densities being too high to adequately treat their waste using anaerobic lagoons. He suggested that the current situation can only be seen as a complete failure of the system. A failure of the zoning regulations, the conditional permit regulations, and a failure of what is defined as best available technologies. Mr. Doxey said that people should not be subjected to this type of extreme odor problem. He said that the only thing that the County is able to do is to put a provision in their ordinance stipulating that only aerobic lagoons will be permitted for these hog operations. He requested that the Board take appropriate action to go to the legislature and request the ability to address and monitor odor issues, and to increase the level of best available technology.

Mr. Adams asked if the ordinance only addressed hog and poultry operations. Mr. Doxey said that it also would address cattle, but on a different level. He said that they would still allow anaerobic lagoons for cattle CAFOs.

Mr. Williams noted that Mr. Doxey had stated that the industry was out of control. He asked Mr. Doxey to provide a basis for the statement. Mr. Doxey said that the statement was based on the nationwide nature of the problem. He said that the \$65 million in funding coming from a private company to address this issue was a good example of the seriousness of the problem. The \$12.5 million lawsuit is also an example of the type of action required to get companies to fix the problem. He also noted that ordinances addressing hog CAFOs are being developed across the nation including the states of North Carolina, California, Oklahoma, and Illinois. Mr. Williams discussed the process of local involvement in setting appropriate standards for septic tank densities in Tooele. He asked Mr. Doxey if he thought that a similar approach would work in this context. Mr. Doxey said that he thought it would be very positive to have local involvement in the permitting process. He said that the DWQ staff has done a good job in conveying information, but that he would have like earlier involvement in the permitting process. Mr. Ostler stated that there has been much more communication on permitting than that which occurred at public hearings. Staff has held numerous meetings and telephone conversations on permitting issues, including many discussions with both county commissions.

Ms. Weschler noted that much of the discussion had centered around a technological fix to the odor problem. She said that the larger issue is that the ultimate number of hogs proposed at full build-out is 2.5 million, nowhere near the current level. She said that this will cause huge lifestyle changes in the area, and that this was an issue which the local residents have voiced concern over.

Dr. Nielson noted that Mr. Doxey had stated a need for the state to receive some authority from the legislature in terms of addressing odor and other issues. She said that when the Department has had this discussion with the legislature and they have indicated that the issue could be better dealt with at the local level. Mr. Doxey said that he felt that the legislature needed to change its mind on the issue. He cited lack

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of county resources as the main problem. Dr. Nielson discussed an approach where the state could provide technical expertise or funding to provide support, while leaving the actual jurisdiction for rulemaking at the local level. Mr. Doxey said that he would support such an approach.

Mr. Brian Harris, Administrative Manager, Beaver County Commission said that the county has looked into the possibility of an agriculture an odor ordinance. At his point they have decided not to proceed in this direction, but instead move ahead with the Coordinating Committee. He said that under the current ordinance, a conditional use permit is required from the Planning and Zoning Commission. He discussed the history of the last conditional use permit approved by the Commission. The application was submitted in February, 1999. After the application was tabled two times, the Commission approved the conditional use permit in April, 1999, with the following condition: All wastewater lagoons will be covered with a continuous physical barrier between the lagoon and the atmosphere. It must have no uncontrolled vents. Odor emissions from lagoons may not be vented to the atmosphere. Vents must be connected to equipment designed to capture, control, combust and/or treat the odors and emissions. The conditional use permit was approved without an open-air anaerobic lagoon. In May of 1999, Circle Four returned to the Commission and asked them to remove the condition on the grounds that it was impossible to meet. The Planning Commission denied the request, and Circle Four appealed the decision to the County Commission. The County Commission denied the appeal, but said that they hoped that the Company could go back to the Planning Commission and work out an acceptable waste handling technology. In September of 1999, Circle Four went back to the Planning Commission and asked that an open-air anaerobic lagoon to be permitted. The Planning Commission also denied this request. Circle Four again went before the County Commission with a formal appeal that anaerobic lagoons be approved as a waste handling system. The appeal was again denied and referred back to the Planning Commission. In November, 1999 the Planning Commission agreed to try the BION System or another alternative technology other than an open-air anaerobic lagoons. Mr. Harris stated that in his opinion, an open-air anaerobic lagoon would not be approved for use in Beaver County because of odor concerns.

Mr. Dennis Miller, Beaver County Planning and Zoning Commission stated that the quality of life in the Milford area has definitely been affected by the odor problem. He said that the current technology was not working from that standpoint.

Mr. Williams asked if the level of coordination between the state and local officials has been adequate. Mr. Harris said that it has improved greatly with the formation of the Coordinating Committee and was adequate at this point.

Mr. Pullman stated that he felt that a lot of the information that Mr. Doxey shared was conjectural and not based on fact.

Mr. Maxell said that he was pleased to see Circle Four moving forward with new innovative technology. He said that he was disappointed that monitoring data was not collected from the BION System. He hoped that the Company would continue to evaluate that option.

Chairman Shaw thanked all participants for attending the meeting and sharing their input on these issues.

LOAN PROGRAM

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- **1. Financial Assistance Status Report -** Ms. Nancy Hess updated the Board on the financial status of the Wastewater Loan Program as outlined under Tab 4 of the Board's Packet.
- 2. Millville City (Action Item) Mr. Tim Beavers briefed the Board on Millville City's proposed project as outlined under Tab 4 of the Board's packet. Mr. Beavers introduced Gayle Hall, Mayor of Millville City, Councilman Greg Egleston, Councilman Mike Johnson, Daryl McLaughlin and Brian Davis from Sunrise Engineering. He said that the project consists of a gravity flow collection system which will connect to an interceptor line to Logan's treatment plant. The project would sewer the main nucleus of the town. The outer areas would take care of their own improvements as they are developed. He said that Millville has held two public meetings and has found the people to be very receptive to the project. The estimated cost of the proposed project is \$4.9 million dollars.

Mr. Beavers said that staff is recommending a \$2 million SRF loan, for a 20 year term at 0% interest, a Water Quality State Loan of \$987,000 at 0% with a 30 year term, and a Hardship Grant of \$2 million for a total of \$4.987 million dollars. Mr. Beavers said that staff is also recommending that the Board authorize a \$234,000 advance from the Hardship Grant for design. He said that the funding was subject to the following conditions: 1) the City must complete the facility planning process prior to the release of funds for design; 2) the City must complete a Water Conservation and Management Plan; 3) the City must agree to participate in the annual Municipal Wastewater Planning Program; and 4) the City will be required to make a prepayment on the WQB 30 year loan on an additional \$150/year debt service payment for every equivalent residential unit served over 420 units.

Mayor Hall commented that Millville would very much like to do this project and feels there is support in the community.

Ms. Wechsler asked how the project may affect growth and sprawl issues in the area. Mayor Thompson stated that Millville is an appropriate and logical area for residential growth. Mr. Baker stated the County Planning Group has taken a very proactive stance towards areas they want sewered to concentrate development in these areas to avoid sprawl. Mayor Thompson stated the County has a county-wide planner and management plan. He said that while the plan is not yet formally adopted, it provides an accepted concept of an urban growth boundary for each of the cities. He said that he felt that the County was being very proactive in directing growth rather than simply reacting to it.

Action Taken:

It was moved by Mayor Thompson, seconded by Dr. Sims to authorize a \$2 million SRF loan, for a 20 year term at 0% interest, a State Loan of \$987,000 at 0% with a 30 year term, and a Hardship Grant of \$2 million subject to the conditions outlined in the staff's feasibility report. Also, that the Board authorize a \$234,000 advance from the Hardship Grant for design. The motion was carried by a vote of 9-0 with Ms. Wechsler abstaining.

STAFF REPORTS

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System Projects - Mr. Walt Baker stated that since the last meeting where he presented a summary of potential ideas the Board, staff has met with the local health department (LHD) directors and the Utah Association of Conservation Districts (UACD) to discuss these same ideas. The LHD officers were very interested in this Board providing financing for fixing on-site wastewater disposal system problems, since it would provide them a way to address those problems short of evicting people. The LHD directors said that they would like to see the Board streamline the process as much as possible and limit the red tape. Mr. Baker said that he had originally suggested a pooling date where all applications would be acted on together. He said that the LHD's would prefer not to have a pooling date since problems may require immediate attention. Mr. Baker said that the LHD's asked if an on-site disposal system is not feasible to replace, but a sewer is within reach, could the Board fund the lateral to the sewer. He said that staff was looking into this issue.

UACD suggested the individual soil conservation districts be involved in the project approval process, since this is the process which is presently in place with the Agriculture Resource Development Loan (ARDL) loan program. Mr. Baker said that ARDL has a loan origination fee that they charge loan recipients. Those funds are then utilized by the soil conservation districts as they work with the loan recipients. He said that the staff may consider doing something along these lines. Mr. Baker said that there are still questions on how the DWQ's loan program would interact with ARDL. He said that he prefers applicants going to ARDL first and then coming to the WQB.

2. Annual Sewer User Charge Survey - Ms. Nancy Hess presented the results of the annual sewer user charge survey as outlined under Tab 5 of the Board's Packet. She said that many towns with lower populations have low rates; lower rates than perhaps they should have because they are not raising their rates to build a reserve for future improvements. In contrast, districts with large populations are in the position where they are not needing to borrow because they are building their own reserves. Ms. Hess said that she felt that our customers are basically going to come from the lower population areas. The Board had a discussion on sources of funding used by communities including property taxes and funds generated by other utilities.

OTHER BUSINESS

Circle Four Farms - Continued Discussion. Dr. Nielson noted that since the Circle Four Coordinating Committee is meeting on a monthly basis, it would be a good idea if the Board could continue to get regular updates on how that process is going and how Circle Four is doing with different technology. Mr. Shaw said that he would be interested in determining what Iron County would like to see in the way of more communication. He said that he was unsure of what steps the County would like to see the Division take in this regard. Mr. Adams pointed out that when he was originally with Circle Four, he had discussed all aspects of the project with the Iron County Commission. He said that he felt that communication has occurred from the very start of the project. Dr. Nielson said that she was most interested in following up with Circle Four to see whether the alternatives they are proposing are actually working. Mr. Child commented the odor seems to be the driving issue here, but at the appeal hearing last year, it appeared that the focus was to put an end to the hog farms as a whole. Mr. Adams said that he felt that the citizens that come to these meetings do not necessarily represent the feelings of the majority of people living near the farms.

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NEXT MEETING

The next meeting of the Board was tentatively Health Building Room 125 .	scheduled to be held on January 19, 2001 at the Cannor
	K. C. Shaw, Chairman

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